

## RELIGION ON WHICH THE DEVOUT AND SKEPTIC CAN AGREE

by Matt J. Rossano

*Abstract.* A starting point for a constructive exchange between two groups, devout religionists and scientific skeptics, is that they can hold certain religious ideas in common. These ideas, however, must preserve the compelling nature of religious commitment without unduly compromising rational sensibilities. In the histories of both science and religion progress has been made by synthesis. The definition of religion is a key issue for the success or failure of synthesis, and I propose a new definition. Both devout religionists and scientific skeptics must make compromises if synthesis is to be successful. For the devout these compromises include waiving the prerequisite of belief in the supernatural and placing behavior above belief. For the skeptic they include abandoning explanatory exclusivity, acknowledging the authority of moral experts, and recognizing the necessity of community in achieving moral excellence. I defend each of these compromises as reasonable and tolerable costs of integration.

*Keywords:* compromises; defining religion; *mysterium tremendum*; science/religion integration; synthesis

---

Cornell biologist William Provine is well known for his assertion that people must check their brains at the church-house door in order to subscribe to religion. In his view the empirical nature of science is wholly incompatible with the devotional acceptance that characterizes religious belief. The statement, however, conveys more than just a benign incompatibility; it suggests, not very subtly, that science is reasonable and religion delusional. Sentiments such as these, expressed by prominent scientists, have corrosive effects on the general public's view of religion and its relationship to science. A single, penetrating, easily digestible statement such as Provine's is

Matt J. Rossano is Professor of Psychology at Southeastern Louisiana University, Box 10831, Hammond, LA 70402; e-mail [mrossano@selu.edu](mailto:mrossano@selu.edu).

[*Zygon*, vol. 42, no. 2 (June 2007)]

© 2007 by the Joint Publication Board of *Zygon*. ISSN 0591-2385

often far more effective at shaping public perceptions than all the dense, technical debates to which academicians are prone. Little is gained from the science-religion dialogue if its insights and benefits remain largely inaccessible to interested laypersons. Thus, a necessary element in the dialogue is a practical integration, broadly accessible with the potential for some form of real-world application. In the following I propose a framework for just such an integration.

#### SYNTHESIS: WHY BOTHER?

An initial hurdle facing any attempt to integrate science and religion is that of justifying the endeavor. Is a science-religion synthesis even possible? If faith—an acceptance of the unproven—is the fundamental difference between the scientific skeptic and the devout religionist, one might contend that this distinction is dichotomous with no intermediate common ground. The devout have faith; the skeptics do not. That the majority of scientists are not religious would tend to confirm this contention.

Other observations, however, suggest that a viable quantity of science-religion overlap may exist. First, most religious persons, and most religions for that matter, place a high value on reason. Religious faith is typically not blind faith. The fact that more than one Nobel-caliber scientist (John Eccles and Charles Townes are examples) have been counted among the devout highlights this point. Second, a certain “faith”—the unprovable proposition that the universe is orderly and that the scientific method is the best way to uncover that order—is essential to science and the work of all scientists.

On this second point, however, scientific skeptics may rightly hesitate, sensing that the “faith” being ascribed to them hardly seems cut from the same cloth as that of the “faithful.” One may not be able to prove the orderliness of the universe in the strictest Aristotelian sense, but the track record of the universe is pretty good in that regard. Likewise, one may not be able to show definitively that the scientific method is the best method for uncovering that assumed order, but it has worked very well for centuries. Believing that the sun will rise tomorrow based on past evidence does not seem quite the leap of faith that believing in God is. Thus, most scientists would refer to their “faith” in order as more a “confidence” based on past evidence than a religious faith.

The challenge, then, is to discern what one might confidently, reasonably believe in. Religionists want to believe in something compelling, inspiring, and life-changing; skeptics (if they desire any belief at all) want something rational and reliable that serves to promote, not stifle, human inquiry. For any successful synthesis the religionist must be willing to move somewhat in the skeptic’s direction, making his or her faith more compatible with reason and evidence. Likewise, the skeptic must be will-

ing to move somewhat in the devout's direction, acknowledging that human beings often experience the world as morally inspiring and that science is of limited value in helping us to understand the full depth of that experience.

There is a further reason for taking up the cause of synthesis. History shows that in both science and religion progress is often made through synthesis. A few examples will help to build the case.

*Science.* Charles Darwin's original genius was not in discovering evolution. Evolutionary ideas were circulating in scientific circles at least a century before Darwin. Darwin's (and Alfred Wallace's) great contribution was identifying the mechanism by which evolution operates—natural selection. The theory of natural selection rests on the notion of inherited variance among phenotypes and the differential reproductive success of those phenotypes as they interact with the environment. Although Darwin presented a convincing case for natural selection, a key element was missing: the means by which inherited variance was passed along from parent to offspring. Darwin knew nothing of Mendelian genetics. This shortcoming hampered progress in evolutionary theory for many decades after Darwin's original proposal. When Gregor Mendel's work was rediscovered early in the twentieth century it was initially interpreted as being incompatible with Darwinian evolution. It took the insights of scientists such as Ronald Fisher, Sewell Wright, J. B. S. Haldane, and others to demonstrate how the mechanics of Mendelian genetics operated within the framework of natural selection. The successful synthesis of Darwinism and Mendelian genetics (neo-Darwinism, or the Modern Synthesis) has been the bedrock of the modern success of evolutionary theory.

In more recent decades, synthesis in evolutionary biology has become a growth industry. In 1975 E. O. Wilson published his landmark *Sociobiology: The New Synthesis*. In it he proposed that evolutionary principles extend not only to the structural adaptations observable in most animals (a monkey's tail or a moose's antlers) but also to their social behavior. In recent years psychology has further extended this range, eagerly embracing evolution as a basis for the mental and social aspects of human nature under the rubric of evolutionary psychology. In these developments we see constructive connections being created across disciplines (psychology and evolutionary biology, for example) which had been largely separate from each other.

A similar synthetic movement has driven decades of work in physics. The grand unified theory of everything (GUT) in physics seeks a synthesis between the four fundamental forces of the universe: gravity, electromagnetism, and the strong and weak nuclear forces. Already evidence indicates that the weak nuclear force and electromagnetism may be one and the same (the electroweak force). Currently, great effort is being expended

to unify the electroweak force with the strong force, leaving only gravity outstanding. Success in this effort would necessarily mean that an even greater synthesis would have been achieved—that of uniting the laws of quantum physics with those operating at the macro level.

In these developments we see that much of what drives scientific progress is in the form of synthesis. Darwin could see that offspring varied and that those variations could be advantageous or disadvantageous, depending on the environment. Mendel also could see that offspring varied, but his focus was on the algorithm producing those variations. Not until decades later did other scientists recognize that Darwin and Mendel were dealing with the same issue of inheritance and that the principles they uncovered were related. Synthesis is often most successful under circumstances in which independent perspectives provide related information on the same general phenomenon. Although science may be more mechanistic and religion more moralistic, both deal with the nature of the cosmos and the role of life (especially human life) within it.

*Religion.* Examples of progress through synthesis are also apparent in the long history of Christianity. A forceful proponent of synthesis was Augustine of Hippo (354–430). In his voluminous writings (especially *Confessions*) Augustine championed integration between neo-Platonic philosophy and Christian theology. In the Platonists Augustine found an understanding of God and God’s relationship to the world that made sense to his philosophical mind. In the Bible he found a compelling image of love and sacrifice in the person of Jesus that motivated him to a life of contemplative monasticism (Arieti and Wilson 2003; *Confessions* 7, 20–21). Augustine’s enthusiasm for the integration of “pagan” philosophy with Christian theology, however, was not shared by all of the early church fathers. Tertullian, most notably, was one who viewed pagan philosophy with utter contempt: “What has Athens to do with Jerusalem, the Academy with the Church? . . . We have no need for curiosity since Jesus Christ, nor for inquiry since the Evangel” (*De Praescriptione Haereticorum*, 7, from Cochrane 1940, 222–23).

Eight and a half centuries later the issue was not Christianity and neo-Platonism but Christianity and Aristotelianism, and the major player was not Augustine but Thomas Aquinas. In a flurry of intellectual productivity that lasted only about two decades, Aquinas achieved a monumental synthesis of Aristotelian philosophy with Christian theology. For Aquinas the notion of double truth (one derived from philosophy, the other from theology) was anathema. Correctly understood, Aristotle’s rigorous logic, though incomplete, complemented rather than contradicted revelation. In due time Thomas’s achievement would be properly recognized as a bold and ingenious step in the centuries-long development of Christian thinking, but in its immediate aftermath it was harshly criticized. Powerful

figures in the Roman Catholic Church decried Thomism as a pagan pollution of sacred scripture. On March 7, 1277, three years (to the day) after Thomas's death, Bishop Tempier of Paris issued a condemnation of many of his teachings. A similar condemnation was issued eleven days later by the Archbishop of Canterbury, Roger Kilwardby.

These historical events convey important lessons. First, Christianity (and religion more generally) has a long history of confronting controversy over the integration of pagan knowledge with the accepted canons of faith. Second, when facing these controversies, rival camps often form, with one side strongly advocating synthesis (Augustine and Aquinas) and the other strongly advocating separation (Tertullian, Tempier, Kilwardby). Third, history tends to celebrate successful synthesizers and forget segregationists. Augustine and Aquinas are revered doctors of the Christian Church and familiar to even casual observers of religion. Tertullian, Tempier, and their comrades are better remembered by agnostic philosophers and historians than by average Christians. In principle, the challenge that science poses to religion is no different from that which confronted Augustine and Aquinas: What to do with pagan knowledge? As in the past, camps are arrayed on either side with arguments for separation (Gould 1999) and integration (Haught 2003; Miller 1999) being posed.<sup>1</sup>

Thus, the argument for synthesis can be succinctly stated: The modest faith (or confidence) required for good science and the rationality required for good religion provide a starting point for a synthetic program, and the histories of both science and religion reinforce the lesson that synthesis often promotes progress. Furthermore, for religion especially, the challenge of a deeper integration with science holds the promise of theological advances similar to those achieved in the past when Christianity confronted Platonism and Aristotelianism.

#### DEFINING RELIGION

Attempts at synthesis require looking critically at how important terms are defined. Thomas's teachings were condemned in part because of his willingness to accept the Aristotelian definition of the human being as a unity of soul and body rather than the more Platonic-Augustinian definition of a soul trapped within a body (Wippel 1977). This definition allowed for a productive integration of Aristotelianism and Christianity, but it had some challenging implications as well. The same struggles and challenges over definitions confront us if we wish to find a productive and practical synthesis of science and religion. The success of any integration between science and religion turns critically on how one defines *religion*.

In his book *Primitive Culture* (1871) Edward B. Tylor claimed that, at minimum, religion required belief in supernatural beings. The classic definition found in the *Oxford English Dictionary* (1971) contains this idea

but adds the notion that these supernatural beings affect humanity's destiny and therefore require worship and obedience: "recognition on the part of man of some higher unseen power as having control of his destiny, and as being entitled to obedience and worship." The definition offered by Tylor's colleague and contemporary James George Frazer also reflects these two features of the belief in a supernatural realm and the notion that this realm possesses the power to affect human lives: "By religion, then, I understand a propitiation or conciliation of powers superior to man which are believed to direct and control the course of Nature and human life" ([1890] 1941, 50). Current definitions continue to echo these themes. According to sociologist Steve Bruce, religion involves "beliefs, actions, and institutions predicated on the existence of entities with powers of agency (that is, gods) or impersonal powers or processes possessed of moral purpose (the Hindu notion of Karma, for example) which can set the conditions of, or intervene in, human affairs" (2002, 2). Rodney Stark writes, "Religion consists of very general explanations that justify and specify the terms of exchange with a god or gods" (1999, 270).

These examples represent a particular class of definitions that I call "reaching down" definitions, because there is the assumption of a supernatural world that can reach down to affect human affairs. From this perspective, a central focus of religion involves rituals and practices that humans engage in for the purpose of influencing how the supernatural world affects us. If the gods control the forces of the wind and weather, humans may offer a sacrifice or perform a ritual before setting sail in order to ensure favorable conditions for the journey. The supernatural world is assumed to reach down and affect us, so we perform some religious action (ritual or sacrifice) that serves to maintain or reestablish its favorable influence.

There is nothing necessarily "wrong" with defining religion in this way. It certainly captures what has been (and arguably continues to be) an important feature of religion. The limitation of any reaching-down definition is that it directly, and perhaps unnecessarily, conflicts with a scientific view of the world. Modern science severely undermines the notion of a supernatural world directing or affecting natural processes.

A second class of definitions I call "reaching up" definitions. These are not only more congenial to a scientific worldview but also are more common among scientifically minded religious thinkers. Take, for example, the definition proposed by William James: "Religion, in the broadest and most general terms possible . . . consists of the belief that there is an unseen order, and our supreme good lies in harmoniously adjusting ourselves thereto" (1902, 53). Alfred North Whitehead offers a somewhat more wordy one:

Religion is the vision of something which stands beyond, behind, and within, the passing flux of immediate things; something which is real, and yet waiting to be realized; something which is a remote possibility, and yet the greatest of present

facts; something that gives meaning to all that passes, and yet eludes apprehension; something whose possession is the final good, and yet is beyond all reach; something which is the ultimate ideal and the hopeless quest. (1925, 92)

And consider this one by Emile Durkheim: “A religion is a unified system of beliefs and practices relative to sacred things, that is to say, things set apart and forbidden—beliefs and practices that unite into one single moral community called a Church, all those who adhere to them” ([1912] 1995, 44).

In each of these definitions we find reference to something transcendent, something mysterious, that humans sense but cannot fully grasp rationally. For James it is an “unseen order,” for Whitehead a “vision of something that stands beyond,” and for Durkheim “sacred things.” These definitions reflect human beings reaching up for something transcendent, though not necessarily something supernatural. Note also how each implies a certain response to the transcendent. For James it is “harmoniously adjusting ourselves thereto”; for Whitehead it is “the hopeless quest [to possess] the final good . . . beyond all reach”; for Durkheim it is “practices that unite into one single moral community called a Church.” Similar themes can be found in definitions offered by Carl Jung (1938, 6), Clifford Geertz (1966, 4) and Michael Barnes (2003, 2).

In these definitions we have an image of humans sensing, though not fully comprehending, something transcendent and responding to it by transforming their attitudes and behavior. Reaching-up definitions not only present less of a conflict with a scientific worldview but may in fact find support from it. Although science has undermined the credibility of an effectual supernatural world “above” us, it has revealed an amazingly vast and almost incomprehensibly elegant universe stretching immeasurably beyond us (Green 1998).

With this in mind, I now offer a reaching-up definition that I will defend as potentially acceptable to both the devout religionist and the scientific skeptic: *Religion is our response to the realization that there is something greater than humanity in the universe, which inspires us to live lives of greater compassion, self-restraint, and service.* In what follows I examine the concepts contained within my definition and show how it retains the compelling texture of traditional faith (necessary for the devout) without unduly compromising rationality (necessary for the skeptic).

*Something Greater.* The notion of something greater than humanity is intended to be open-ended. For the devout, this is of course God. Among them, however, a diversity of views exists. Different monotheistic traditions (Judaism, Christianity, and Islam) do not envision God in precisely the same way. Other theists depart even further, envisioning something more akin to a Platonic Form (of the Good, perhaps), an Aristotelian Prime Mover, or an even deeper abstraction such as James’s “unseen order.” The

“something greater” of the current definition is meant to allow for all these and still other possibilities.

Among the skeptics, of course, none of these religious notions of something greater is likely to be very appealing. For them, this concept may simply be nature itself or the laws of physics. This “natural” form of the something greater need not be any less impressive or inspiring than the more supernaturalistic ones of theists. The incomprehensible magnitude of our universe, the improbable fortuitousness of nature’s laws for the existence of life, and the incredulity thrust upon us by quantum indeterminacy all stretch our imagination in ways far beyond the myths and superstitions of our ancestors. In short, religious wonder may no longer need supernaturalism.

An often-cited example of this was expressed by Albert Einstein as he contemplated the amazing orderliness of the universe: “. . . everyone who is seriously involved in the pursuit of science becomes convinced that a spirit is manifest in the laws of the Universe—a spirit vastly superior to that of man, and one in the face of which we with our modest powers must feel humble” (quoted in Dukas and Hoffman 1979, 32–33). More recently this same sense of “Einsteinian awe” has been expressed by complexity theorist Stuart Kauffman: “We latter-day players are heritors of almost 4 billion years of biological unfolding. If profound participation in such a process is not worthy of awe and respect, if it is not sacred, then what might be?” (1995, 303) and most passionately by biologist Ursula Goodenough:

I lie on my back under the stars and the unseen galaxies and I let their enormity wash over me. . . . I take in the abstractions about forces and symmetries and they caress me, like Gregorian chants, the meaning of the words not mattering because the words are so haunting. Mystery generates wonder, and wonder generates awe. The gasp can terrify or the gasp can emancipate. As I allow myself to experience cosmic and quantum Mystery, I join the saints and the visionaries in their experience of what they call the Divine. . . . (1998, 12–13).

The important point here is that the encounter that thoughtful nontheists have with scientifically revealed nature is in many respects similar to the devout’s encounter with God. The two groups may not articulate this “something greater” in the same way, but the diversity of meanings between them may be no more varied than what is found among theists of different stripes. Enough common ground may exist on which to begin some bridge building.

As a conceptual bridge between the devout and the skeptic I propose a notion put forward nearly a century ago by theologian Rudolf Otto (1923): *mysterium tremendum et fascinans*.<sup>2</sup> Otto used this phrase to describe the experience of God, but it seems equally well suited to the scientist’s experience of Einsteinian awe. For Otto the experience of the divine was characterized by (1) rational incomprehensibility and inexpressibility (mystery),

overwhelming power and awful (awe-inspiring) presence (*tremendum*), and (3) a simultaneous reaction of fear and irresistible attraction (*fascinans*). To the devout, God is a colossal force capable of both mighty creation and destruction on whom humans are both frightfully dependent and lovingly secured. To the skeptic, the laws of physics and the great epic of evolution are at once the origins of all life, complexity, and beauty as well as incalculable suffering, extinction, and waste. Both the devout and the skeptic are overpoweringly attracted to the grand yet terrible and paradoxical majesty of this “something greater.”

*Religious Response.* The proposed definition of religion sees religion as a *response* to the something greater. It is not enough simply to encounter the divine or to have a religious experience of nature; one must respond to that event. Given that the response is a reaction to something external to the individual, I contend that it is therefore truly religious. All of the definitions of religion discussed earlier, including the present one, make reference to something external as a motivating force for human behavior. This contrasts with exclusively human-derived ideologies or philosophies such as Marxism, Utilitarianism, or secular humanism. The ideals inherent in these systems can (and do) motivate behavior, but their ultimate source is internal—that is, it can be traced to human reason and instruction with no claim to being modeled on some higher transcendent order. Although reason and instruction play important roles in religion, a religious motivation traces its ultimate source to something beyond humanity—a transcendent order of things that humans seek to attain.

Thus, religion entails the recognition of something greater coupled with a reaction inspired by that realization. This inspired reaction takes on the form of seeking—a lifelong adventure or quest to achieve a closer relationship with or greater understanding of the *mysterium tremendum*. The devout often conceptualize this as building the kingdom of God. By serving God’s church and ministering to God’s people the devout seek to create a moral community that increasingly approximates the perfect order and justice of the divine. In the context of the synthesis currently being envisioned, the devout are invited to enlarge their quest to include scientific knowledge as part of the resource pool they tap in the course of building their moral community. For scientists a similar type of seeking is common. Many view themselves as engaged in a lifelong quest for understanding, a quest that often begins in the form of solving “small” theoretical problems but enlarges over time. As part of a synthesis project they are likewise invited to enlarge their search by accessing the knowledge of the great religious wisdom traditions and participating in communities that seek moral excellence as well as professional communities that seek scientific excellence.

*Specifics of the Response: Compassion, Self-Restraint, Service.* The specifics of the response called for in my definition are in keeping with the best teachings of the world's great religious traditions and empirically demonstrable as being beneficial for individuals and their communities. Compassion is a central theme in nearly every religious tradition. In Mahayana Buddhism, compassion takes the form of Tara, the goddess of compassion and mother of all Buddhas, and *bodhisattvas* are enlightened ones who have chosen to remain in the world out of concern for the spiritual development of others. In Islam, Allah is known as Al-Rehman, or The Compassionate, and *zakat*, charity to the less fortunate, is one of Islam's great pillars. Self-restraint is embodied in nearly all religious traditions in the form of divine laws or commandments that the faithful must follow. Practicing Jews are bound to more than six hundred laws. In Hinduism, to achieve the ultimate goal of *moksha*, release from rebirth, *dharma* is required. Dharma, right behavior, includes such things as *artha*, the pursuit of legitimate worldly success, and *kama*, the pursuit of legitimate pleasure. Service is well reflected in the Christian tradition where Jesus is portrayed as washing the feet of his followers and commanding that the greatest among them must serve the least (John 13).

check  
spelling

Compassion, self-restraint, and service are not just intuitively desirable, universal teachings from varied religious traditions; they are also empirically beneficial to those who practice them and to the communities of which they are a part. For example, those who exercise compassion in the form of forgiveness have been found to have reduced cortisol levels. Cortisol is a physical indicator of stress that when elevated can have deleterious effects on immune-system function (Berry and Worthington 2001; Sapolsky 1993). The self-restraint embodied in religious behavioral commandments appears to play an important role in protecting adolescents from drug abuse and delinquency (Jang and Johnson 2001; Merrill, Salazar, and Gardner 2001). Furthermore, most religions place a high value on marriage and fidelity within marriage. Studies have shown that stable, high-quality marriages provide both physical and psychological benefits to those involved (Coombs 1991; Gallo et al. 2003; Lillard and Waite 1995; Myers 2000; Wilson and Oswald 2002). Service in the form of volunteerism, community and civic involvement, and church membership are important indicators of community health (Social Capital Survey 2001). Thus, the specific religious injunctions to practice compassion, self-restraint, and service need not be accepted simply on authority (as may be sufficient for the devout) but also hold rational appeal to the skeptic because of their established empirical functions in building individual well-being and community health.

MOVING TOWARD ONE ANOTHER: COMPROMISES  
THE DEVOUT MUST MAKE

As stated earlier, in order to find common ground between the devout and the skeptic each must move in the other's direction. If practical integration between these groups is to be achieved, we must articulate the manner of that movement. How do the devout make their religion more rational and therefore more welcoming of skeptics? How do skeptics adopt a worldview more open to the powerful inspirational and spiritual nature of human experience? Starting with the devout, I have two proposals.

*Waive the Supernatural Prerequisite.* Nature as revealed by science poses a challenge to our imaginations as great, if not greater, as our predecessors' supernatural worlds did. Realizing that there is something greater than humanity in the universe and responding by living a life of greater compassion, self-restraint, and service need not entail belief in the supernatural. Waiving the supernatural prerequisite does not mean, however, that it must necessarily be abandoned. As in the past, the devout may find such beliefs (in miracles, the afterlife of the soul, resurrection, and the like) to be powerful motivators for living an ethical life. Skeptics, however, should be permitted to find their motivation elsewhere. The critical point of agreement is that a particular behavioral response or lifestyle is required of the religious person. If belief in the supernatural contributes constructively to the practice of this lifestyle, let it thrive. If it is a hindrance, let it be set aside.

*Place Behavior above Belief.* Possibly the most challenging move the devout, especially the Christian, must make is to see behavior rather than confessional beliefs as the defining feature of a religious person. Religion is what one does, not necessarily what one professes. Although this may seem challenging, there is much basis for it in the Judeo-Christian tradition as well as in other traditions. In Matthew 25:31–46 Jesus describes the judgment of the Son of Man. This final judgment is based on behavior—"I was hungry and you fed me, I was thirsty and you gave me drink, naked and you clothed me"—with no mention of beliefs. Interestingly, historians have identified this particular passage as a likely authentic teaching of Jesus (Ehrman 1999). This should hardly be surprising, as there is a long tradition in rabbinical Judaism of emphasizing behavioral compliance with God's laws as paramount over any "correct" set of intellectual beliefs (Prager and Telushkin 1975). The Hebrew Scriptures even go so far as depicting God anointing a non-Jew as the chosen one to save Israel (see Isaiah 44–45). This theme is prominent not only in the Jewish roots of Christianity but in its Hellenistic ones as well. In Plato's *Phaedo* (82a–84c), Socrates discusses the destination of the soul after death, clearly stating that it depends on the manner in which one has lived life: ". . . the

destination of others will depend on the way in which they have *behaved*. The happiest of these, who will also have the best destination are those who have *practiced* popular and social virtue” (82a; emphasis added).

These passages suggest that the devout need not consider placing behavior above belief as a fundamental or intolerable break with long-standing tradition. Rather, it can be defended as the rediscovery of old traditions that have been, for various reasons, devalued over the long course of history (for recent discussion see Ward 2000, 244).

#### MOVING TOWARD ONE ANOTHER: COMPROMISES THE SKEPTIC MUST MAKE

*Abandoning Explanatory Exclusivity.* The scientific skeptic must acknowledge that science is not the sole source of knowledge about the universe. For some issues, such as the subjective human experience of life, human relationships, values, and morality, science has little explanatory power, and other sources including religious ones must be consulted. Consider morality. Science may give us insights into the origins of the human moral sense, but it cannot tell us what moral system is best for human existence. A scientifically rigorous test of, say, Kantian ethics versus utilitarian ethics is simply not feasible. A similar problem is becoming increasingly apparent in the study of consciousness. Scientific methods provide valuable data on the origins, evolution, and biological basis of consciousness (Dehaene 2001; Rossano 2003; Roth 2001), but none of this penetrates into the subjective experience of conscious entities, a realm that many have argued is beyond the third-person, objective methods of science (Chalmers 1996; McGinn 1991; Velmans 2000). Finally, even the most hard-core scientific skeptic must acknowledge that no one lives life by scientific methods, especially when it comes to human relationships. We cannot scientifically test to see whether our friends, potential business partners, or mates are the best rational choices in which to invest our energies and emotions (Frank 1988). We are on our own here, following our emotions and instincts, paying our money and taking our chances with life, hoping that someone’s interest in Homer actually means that he or she might behave honorably.

*Acknowledge the Authority of Religious Leaders.* If science cannot provide all the knowledge relevant to living an ethical life, one must turn to nonscientific authorities. Furthermore, if religion is a response to a sensed higher order of existence, those who have dedicated their lives to achieving a closer relationship with or greater understanding of that higher order may be valuable ethical resources. Thus, the skeptic must allow for a dual set of authoritative voices. Scientific authorities should be studied on issues regarding the mechanistic functioning of the universe and religious

parenthetical addition  
ok or not?

authorities on issues regarding what is of value in the universe. “Religious authority,” however, can be understood quite broadly to include anyone who has prescribed a certain manner of living in response to a sensed order beyond humanity. This may include traditionally recognized religious leaders such as Jesus, Mohammed, and Buddha and also others, such as Socrates, given that his pursuit of the ethical life was done in response to his “daemon.” (Socrates often claimed that his motivation was the voice of a beneficent spiritual being who guided his actions.) The truly wise make themselves students of both the rational/scientific authorities and the religious/contemplative authorities.

*The Necessity of Community in the Pursuit of Moral Excellence.* Just as scientific excellence cannot be pursued in isolation, neither can moral excellence. Both require a community of like-minded individuals who interact with, critique, and support one another. One of the most powerful mechanisms in science is that of self-correction through peer review. This mechanism has been marvelously successful in weeding out weak theories, testing the soundness of new ideas, and steadily moving science forward. To be a scientist requires participation in the public discussion and evaluation of ideas and evidence. Pursuing moral excellence is similarly and necessarily a public venture. In the ancient Jewish tradition, the Sabbath day of rest was for the purpose of gathering in the synagogue to read and discuss God’s law (Sanders 1992). Socrates went into the streets asking people about virtue and justice. If one is serious about living the ethical life and achieving moral excellence, one must be part of a moral community that gathers regularly to reflect upon individual and collective moral progress. Group ritual, dialectical examination of ethical issues and interpretations of sacred texts, and regular reflective and contemplative pauses are necessary for establishing, maintaining, and growing in the ethical life. Just as publication and interaction are necessary in the scientific life, some manner of gathering, prayer, and religious study must be a regular part of one’s moral life.

#### CONCLUSION

John Haught (2003) invites us to understand the natural world as an unfolding promise. For the devout, it is God’s promise, professed in sacred tradition and increasingly revealed in nature’s epic. Skeptics may not see a promise in nature, but they may at least acknowledge an opportunity. Whether assured by God’s promise or emboldened by life’s opportunity, the devout and the skeptic have the joint task of participating constructively in the vast cosmic story. A metaphysical agreement between these camps facilitates that constructive participation. However, it is often the case that an attempt at synthesis between science and religion pleases devotees of neither. No doubt both skeptics and religionists will find much to

disparage in my attempt. The project at hand, though, is a long-term one, and this essay is simply a small step down a long road. Criticisms may help to further refine issues and clarify murky thinking.

More than half a century ago, Edmund Husserl ([1937] 1999), echoing Aristotle, argued that science was incomplete because of its inability to incorporate the human perspective. Similarly, religion becomes irrelevant if it casts aside rational moorings or fails to update antiquated thinking. The devout should not be required to check their brains upon entering the church house any more than scientists should be required to check their souls when donning lab coats.

#### NOTE

A version of this essay was presented at the Local Societies Initiative Conference of the Metanexus Institute on Religion and Science, Philadelphia, Pennsylvania, June 2004.

1. There also seems to be a camp of “deniers” or “eliminativists” who seek to argue the other side away (Dawkins 1998; Johnson 1991; Dembski 1998), but I do not discuss them here.
2. I thank Dr. Jonathan Bassett for directing me to Otto on this issue.

#### REFERENCES

- Arieti, James A., and Patrick A. Wilson. 2003. *The Scientific and the Divine: Conflict and Reconciliation from Ancient Greece to the Present*. New York: Rowman and Littlefield.
- Barnes, Michael H. 2003. *In the Presence of Mystery: An Introduction to the Study of Religion*. Mystic Conn.: Twenty-Third Publications.
- Berry, Jack W., and Everett L. Worthington. 2001. “Forgivingness, Relationship Quality, Stress While Imagining Relationship Events, and Physical and Mental Health.” *Journal of Counseling Psychology* 49:287–310.
- Bruce, Steve. 2002. *God is Dead: Secularization in the West*. London: Blackwell.
- Chalmers, David. 1996. *The Conscious Mind*. New York: Oxford Univ. Press.
- Cochrane, Charles N. 1940. *Christianity and the Classical Culture*. Oxford: Oxford Univ. Press.
- Coombs, Robert H. 1991. “Marital Status and Personal Well-Being: A Literature Review.” *Family Relations* 40:97–102.
- Dawkins, Richard. 1998. *Unweaving the Rainbow*. New York: Houghton Mifflin.
- Dehaene, Stanislas. 2001. *The Cognitive Neuroscience of Consciousness*. Cambridge: MIT Press.
- Dembski, William A. 1998. *The Design Inference*. Cambridge, U.K.: Cambridge Univ. Press.
- Dukas, Helen, and Banesh Hoffman. 1979. *Albert Einstein: The Human Side*. Princeton, N.J.: Princeton Univ. Press.
- Durkheim, Emile. [1912] 1995. *The Elementary Forms of Religious Life*. Trans. K. E. Fields. New York: The Free Press.
- Ehrman, Bart D. 1999. *Jesus: Apocalyptic Prophet of the New Millennium*. Oxford: Oxford Univ. Press.
- Frank, Robert H. 1988. *Passions Within Reason*. New York: W. W. Norton.
- Frazer, James George. [1890] 1941. *The Golden Bough: A Study of Magic and Religion*. New York: Macmillan.
- Gallo, Linda C., Wendy M. Troxel, Karen A. Matthews, and Louis H. Kuller. 2003. “Marital Status and Quality in Middle-Aged Women: Associations with Levels and Trajectories of Cardiovascular Risk Factors.” *Health Psychology* 22:453–63.
- Geertz, Clifford. 1966. “Religion as a Cultural System.” In *Anthropological Approaches to the Study of Religion*, ed. Michael Banton, 1–46. London: Tavistock.
- Goodenough, Ursula. 1998. *The Sacred Depths of Nature*. Oxford: Oxford Univ. Press.

- Gould, Stephen J. 1999. *Rocks of Ages: Science and Religion in the Fullness of Life*. New York: Ballantine.
- Green, Brian. 1998. *The Elegant Universe*. New York: W. W. Norton.
- Haught, John. 2000. *God After Darwin*. Boulder, Colo.: Westview.
- . 2003. *Deeper Than Darwin*. Boulder, Colo.: Westview.
- Husserl, Edmund. [1937] 1999. *The Crisis of European Sciences and Transcendental Phenomenology*. Evanston, Ill.: Northwestern Univ. Press.
- James, William. 1902. *The Varieties of Religious Experience*. New York: Longmans, Green.
- Jang, Sung J., and Byron R. Johnson. 2001. "Neighborhood Disorder, Individual Religiosity and Adolescent Use of Illicit Drugs: A Test of Multilevel Hypotheses." *Criminology* 39:109–44.
- Johnson, Phillip E. 1991. *Darwin on Trial*. Washington, D.C.: Regnery Gateway.
- Jung, Carl G. 1938. *Psychology and Religion*. New Haven: Yale Univ. Press.
- Kauffman, Stuart. 1995. *At Home in the Universe*. Oxford: Oxford Univ. Press.
- Lillard, Lee A., and Linda J. Waite. 1995. "Til Death Do Us Part: Marital Disruption and Mortality." *American Journal of Sociology* 100:1131–56.
- McGinn, Colin. 1991. *The Problem of Consciousness*. Oxford: Oxford Univ. Press.
- Merrill, Ray M., Richard D. Salazar, and Nicole W. Gardner. 2001. "Relationship between Family Religiosity and Drug Use Behavior among Youth." *Social Behavior and Personality* 29:347–57.
- Miller, Kenneth R. 1999. *Finding Darwin's God*. New York: Cliff Street Books.
- Myers, David G. 2000. "The Funds, Friends, and Faith of Happy People." *American Psychologist* 55:56–67.
- Otto, Rudolf. 1923. *The Idea of the Holy*. Oxford: Oxford Univ. Press.
- Prager, Dennis, and Joseph Telushkin. 1975. *Nine Questions People Ask about Judaism*. New York: Touchstone.
- Rossano, Matt J. 2003. "Expertise and the Evolution of Consciousness." *Cognition* 89:207–36.
- Roth, Gerhard. 2001. "The Evolution of Consciousness." In *Brain, Evolution and Cognition*, ed. Gerhard Roth and Mario F. Wullimann, 555–82. New York: Wiley.
- Sanders, E. P. 1992. *Judaism: Practice and Belief 63 BCE–66 CE*. London: SCM Press/Trinity Press International.
- Sapolsky, Robert M. 1993. "Endocrinology Alfresco: Psychoendocrine Studies of Wild Baboons." *Recent Progress in Hormone Research* 48:437–68.
- Social Capital Survey. 2001. <http://www.cfsu.org/communitysurvey/results2.html>.
- Stark, Rodney. 1999. "Micro Foundations of Religion: A Revised Theory." *Sociological Theory* 17:264–89.
- Tylor, Edward B. 1871. *Primitive Culture*. London: John Murray.
- Velmans, Max. 2000. *Understanding Consciousness*. London: Routledge.
- Ward, Keith. 2000. *Religion and Community*. Oxford: Clarendon.
- Whitehead, Alfred North. 1925. *Science and the Modern World*. New York: The Free Press.
- Wilson, Chris, and Andrew Oswald. 2002. "How Does Marriage Affect Physical and Psychological Health? A Survey of the Longitudinal Evidence." <http://www2.warwick.ac.uk/fac/soc/economics/staff/faculty/oswald/wilsonoswaldmarriagejan2002.pdf>.
- Wippel, John F. 1977. "The Condemnations of 1270 and 1277 at Paris." *The Journal of Medieval and Renaissance Studies* 7:169–201.

